

REMARKS

This application is amended in a manner to place it in condition for allowance at the time of the next Official Action.

The amendment to the claims is expected to require further consideration and/or search. Accordingly, this amendment is being filed with a Request for Continued Examination.

Status of the Claims

Claim 34 is amended to include the features from the claims for which it depended, e.g., claim 30 and claim 18, and an additional mixing step, which was not previously considered.

Claim 35 is amended to be consistent with claim 34.

Claim 42 is new.

Support for the amendment may be found, e.g., at page 12, line 18 to page 13, line 12 and Example 3.

Claims 34, 35 and 42 remain in this application.

Claim Objections

Claim 23 was objected to for an informality. This claim has been cancelled, rendering the objection moot.

Claim Rejections-35 USC §103

Claims 18-19, 22-30 and 34-35 were rejected under 35 U.S.C. §103(a) as being unpatentable over DU BOURG et al. WO 01/96403 ("DU BOURG") in light of its U.S. equivalent: US

2004/0112559. This rejection is respectfully traversed for the reasons below.

The claimed invention is directed to a method of preparing a sizing composition by first providing a cationic liquid starchy composition having:

- a dry matter of between 10 and 50%,
- a viscosity, determined according to a T test, of at least equal to 275 mPa~s and at most equal to 930 mPa~s.
- a total nitrogen level at least equal to 0.6% and at most equal to 1.4% by dry weight, and
- a pH of between 3.5 and less than 9.

This starchy composition is diluted to a dry matter content of between 0.5 to 9%, and subsequently mixed with a sizing agent comprising alkenylsuccinic anhydride.

DU BOURG fails to teach such a method.

As previously argued, DU BOURG fails to teach the claimed cationic liquid starchy composition, e.g., DU BOURG fails to teach or suggest the claimed viscosity.

As also argued previously, an unexpected benefit of using the claimed cationic starch composition in such a method as claimed is evidenced by Example 3 of the present specification. Example 3 is commensurate in scope with the claimed method.

Example 3 compares preparing sizing compositions utilizing from the claimed cationic liquid composition, i.e.

Composition B and Composition A, to preparing sizing compositions based on Composition 2 of Example 4 and Example 6 of DU BOURG, i.e., Composition T1 of the present Example 3.

The results demonstrate that the claimed invention leads to better "protection", or better stabilization, of an alkenylsuccinic acid (or ASA) based sizing agent, e.g., protection in the composition formed by the claimed method.

This higher "protective power" can be deduced from the lower particle size (8.2 and 7.5 mm respectively for Additives A and B instead of 11.4 mm for Additive T1) of the sizing composition after 24 hours of storage.

Contrary to the position of the Official Action, this higher stabilizing effect is unexpected in light DU BOURG. That is, as admitted in the Official Action, DU BOURG does not describe an example that falls within the instant claims. Consequently, the better stabilization achieved by following the claimed method cannot be suggested by DU BOURG.

Indeed, in Example 6 of DU BOURG, which deals with ASA-based sizing agents, the cationic starch composition used has a very low viscosity (100 mPa~s when measured at 20 % dry matter). Thus, there is no suggestion in DU BOURG that a more viscous concentrated cationic starch compositions, diluted and mixed with ASA would obtain a more stable ASA based sizing composition.

Therefore, claims 34, 35 and 42 are not rendered obvious by DU BOURG, and withdrawal of the rejection is respectfully requested.

Conclusion

In view of the amendment to the claims and the foregoing remarks, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our credit card which is being paid online simultaneously herewith for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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